

AMSAT News Service Weekly Bulletins
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Relayed from AMSAT BBS NETWORK
N8EMR's Ham BBS, 614-895-2553

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SB ALL @ AMSAT \$ANS-250.01
AMSAT-NA APPOINTS NEW OFFICERS

HR AMSAT NEWS SERVICE BULLETIN 250.01 FROM AMSAT HQ
SILVER SPRING, MD SEPTEMBER 7, 1991
TO ALL RADIO AMATEURS BT

AMSAT-NA President Doug Loughmiller (K05I) Announces New Officer Selections

As everyone is aware a number of officers have recently resigned their positions for a variety of reasons. In response to these resignations I am making the following appointments to fill these key positions.

Bruce Rahn (WB9ANQ) has agreed to serve as interim Vice President of Operations until a permanent replacement can be selected at the AMSAT Annual meeting in November. Bruce has played a key role in the commanding of the Microsat satellites and was recommended to fill the position by the former AMSAT Vice President of Operations, Courtney Duncan, (N5BF) who had worked closely with Bruce on various operational issues. Bruce will continue to serve as lead Microsat command station in addition to assuming his interim duties.

Filling the slot of Executive Vice President which was left open by the resignation of Dr. John Champa (K00CL) is Bill Tynan, W3X0. Bill needs no introduction as he is a founding member of the organization and has most recently served as the Vice President Of Manned Space Operations for AMSAT. Bill has voiced an interest in serving in this capacity and I am pleased that Bill has seen fit to volunteer his expertise and energies to fulfilling this role. He indicates that he wishes to continue to oversee the organizations Manned Space activities until a replacement can be identified and brought up to speed in this area. K80CL has indicated a desire to change his focus of activities upon the more technical aspects of satellite construction and indicates that he will continue to serve as a active volunteer and board member.

Finally, I have appointed former Vice President of Field Operations Mike Crisler (N4IFD) once again to this position replacing Dr. Jeff Wallach (N5ITU). Jeff has been particularly busy with his professional work load leaving little time for volunteer day to day activities of the Field Organization. While Jeff is stepping down as the VP of Field Operations he has indicated that he wishes to continue to participate in various AMSAT activities. N4IFD has recently returned to the Field organization by contributing to a wide variety of activities including hamfest and convention support, most notably this year's Dayton Hamvention.

I wish to take this opportunity to thank Courtney, John and Jeff for all of their contributions to the AMSAT organization their participation has been greatly appreciated.

I know all of you will join me in welcoming Bruce, Bill and Mike into their new positions. We look forward to working with all of these capable gentlemen as they assume their new responsibilities.

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SB ALL @ AMSAT \$ANS-250.02
A0-13 OPERATIONS UPDATE

HR AMSAT NEWS SERVICE BULLETIN 250.02 FROM AMSAT HQ
SILVER SPRING, MD SEPTEMBER 7, 1991
TO ALL RADIO AMATEURS BT

James Miller (G3RUH) Explains Current And Future A0-13 Operations

A0-13 SCHEDULE

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          91Aug15 to 91Sep18 ! 91Sep18 to 91Dec12
Attitude:      180/(12-0)    !      180/0
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Mode-B  :   MA 000 to 095    !   MA 000 to MA 095
Mode-JL :           N/A      !   MA 095 to MA 125  Except Nov 17- Dec 25
Mode-LS :           N/A      !   MA 125 to MA 130  B Transponder OFF
Mode-S  :           N/A      !   MA 130 to MA 140  MA 10-40
Mode-B  :   MA 095 to 256    !   MA 140 to MA 256
Omnis   :   MA 230 to 030    !   MA 230 to MA 030
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ATTITUDE CHANGE NEWS

The planned re-orientation to Blat/Blon 180/20 was completed on Aug 15 and the transponder schedule changed to continuous mode-B.

At this attitude the sun angle (angle of the sun to the solar panels) was 31 degrees, resulting in an effective illumination of $100 \cdot \cos(31) = 86\%$ of maximum. However with the satellite antennas pointing 20 degrees out of the orbit plane, the "squint" or "pointing" angles were very, very poor.

To improve this situation, the attitude latitude was steadily reduced, 2 degrees at a time, and is presently Blon/Blat 180/1, with an associated Sun angle of 39 degrees, or 78% illumination. The illumination is improving about 4% a week, so that on Sept 18 when the Sun angle falls below 30 degrees, Modes JL and S will be restored as previously announced.

ILLUMINATION INVESTIGATION

As the attitude latitude was lowered the Sun angle was implicitly worsened, ultimately reaching 43 degrees, or 73% illumination. This is the poorest value at which we have ever operated A0-13.

However, tests via the Whole Orbit Data collection facility showed that the battery remained adequately charged (just) during the heaviest useage at a weekend.

The implication of this important trial is that during future attitude changes over the next two years our out-of-plane ALAT values can be restricted to about +10 degrees instead of the +25 degrees which had be feared.

This then will ensure continuous good service on mode-B at these times.

FEEDBACK WANTED

There has been much animated discussion recently on A0-13 about the utility of Mode-L. The feeling is essentially that "too much time is devoted to a transponder used too little by too few".

So be it. I (and Peter DB20S and Graham VK5AGR, the other active command stations) would welcome constructive discussion about this. Suggestions as to alternative ways of structuring the schedule would be welcomed.

Remember in your "wild" deliberations the following constraints:

- * Modes L and S are only useful when the squint angle is less than 20 degrees.
- * Mode S transponder is only ON when mode-B is selected, and works FAR better if mode-B's passband is OFF (no transponder).
- * Mode S beacon only when L is ON and J is OFF.
- * Mode J can only be ON when mode L is ON

When all the feedback is in, say by Christmas 1991, we will be able to assess the suggestions, and see how best to reconfigure the flight software to accommodate them where possible.

If there is no feedback, then of course there can't be any changes made! Contact as below, or your local AMSAT representative and ask them to contact:

James G3RUH @ GB7DDX)
 Peter DB20S @ DK0MAV) or U0-14/F0-20
 Graham VK5AGR @ VK5WI)

Information Source

Up to date details of operations from the AO-13 controllers, are ALWAYS available on OSCAR-13's PSK, RTTY and CW bulletins. RTTY is at 15-20 and 45-50 after each hour and CW is at 00-05 and 30-35 after each hour. Frequencies are 145.812 MHz and 435.656 MHz +/- doppler.

[ANS thanks James Miller (G3RUH) for the information for this bulletin]

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 SB ALL @ AMSAT \$ANS-250.03
 CURRENT AO-13 TRANSPONDER SCHED

HR AMSAT NEWS SERVICE BULLETIN 250.03 FROM AMSAT HQ
 SILVER SPRING, MD SEPTEMBER 7, 1991
 TO ALL RADIO AMATEURS BT

AO-13 Transponder Schedule / AO-10 Available for use

The AO-13 transponder schedule is as follows:

15AUG91 to 18SEP91		
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Mode-B	MA 000 to MA 095	
Mode-JL	N/A	
Mode-LS	N/A	
Mode-S	N/A	
Mode-B	MA 095 to 256	Perigee eclipses, Min 9, typical
Omnis	MA 230 to MA 030	29, max 60 mins until end 1991

The spacecraft attitude has been calculated to be:

BLON/BLAT 180/1

The elimination of Modes JL, LS and S are due to poor pointing angles (squint angle) that will result with the reorientation to 180/0. This schedule will last only a month and beginning on 18-SEP-1991 AO-13 is scheduled to a return to an "All Modes" transponder schedule after another set of magnetorquing procedures is completed. This temporary cessation of UHF transponder operation presents an "opportunity" for all Mode J/L, LS and S operators to improve on your station without loosing any valuable operating time on the bird.

OSCAR-10 is currently available for Mode B operation when it is view of your QTH. PLEASE DO NOT attempt to use OSCAR-10 if you hear the beacon or the transponder signals FMinG.

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SB ALL @ AMSAT \$ANS-250.04
PACSAT NEWS

HR AMSAT NEWS SERVICE BULLETIN 250.04 FROM AMSAT HQ
SILVER SPRING, MD SEPTEMBER 7, 1991
TO ALL RADIO AMATEURS BT

A0-16 Experimenter's Day Schedule Announced

A0-16 Command Station Bruce Rahn, WB9ANQ, has announced the following PACSAT Experimenter's Day schedule for the remainder of September and first week of October:

DATE	START TIME	END TIME	MODE
11 Sep	0210 UTC - 11 Sep	0320 UTC - 12 Sep	RC0
18 Sep	0530 UTC - 18 Sep	0640 UTC - 19 Sep	RC0
25 Sep	0530 UTC - 25 Sep	0500 UTC - 26 Sep	RC0
02 Oct	2110 UTC - 01 Oct	2040 UTC - 02 Oct	RC0

RC0: Raised Cosine Only

Operation of the S-Band transmitter with the raised cosine transmitter will resume in the fall.

While Experimenter's Day operations are scheduled to be conducted weekly, users are reminded that these operations may be shortened or canceled to allow uploading of improved spacecraft software. Watch for bulletins in the BBS and the telemetry text frame of A0-16 for changes to the schedule.

Users are requested to send reception reports and comments to WB9ANQ: @A0-16, @L0-19, @U0-14, or via CompuServe to 74017,2454.

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